

AMENDMENTS TO THE CLAIMS

1 1. (currently amended) A method for obtaining a current value of a Management Information
2 base (MIB) variable stored in a managed network device in a network packet router,
3 the method comprising the steps of:
4 receiving a connection of a Web browser to a network packet router;
5 receiving, at an HTTP daemon executed by and hosted within the network packet
6 router, an HTTP request message from the browser to obtain the current value
7 of the MIB variable from the network packet router to which the MIB variable
8 value pertains;
9 receiving the current value of the MIB variable from the MIB of the network packet
10 router to which the MIB variable value pertains; and
11 communicating, using an HTTP reply message from the HTTP daemon and to the
12 browser, the current value of the MIB variable from the network packet router
13 to which the MIB variable value pertains ~~to the browser using an HTTP reply~~
14 ~~message.~~

1 2. (previously presented) The method of claim 1, further comprising the steps of:
2 creating and storing a MIB object tree in a memory of the network packet router;
3 creating an electronic document that contains a representation of one or more MIB
4 variables of the MIB object tree;
5 communicating the electronic document to the Web browser.

1 3. (previously presented) The method of claim 1, wherein the step of receiving the
2 current value of the MIB variable from the MIB of the network packet router includes

the steps of creating and storing a MIB object tree in a memory of the network packet router ; obtaining the MIB variable from the MIB object tree in the memory of the network packet router.

4. (previously presented) The method of claim 1, further comprising the steps of:
creating and storing a MIB object tree in a memory of the network packet router;
creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree;
receiving a user selection of one of the MIB variables based on the electronic document;
wherein the step of receiving the current value of the MIB variable from the MIB of the network packet router includes the step of obtaining the MIB variable that is identified in the user selection from the MIB object tree in the memory of the network packet router.

5. (previously presented) The method of claim 1, further comprising the steps of:
receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface;
creating an SNMP query that requests a current value of the MIB variable based on the HTTP request message; and
communicating the SNMP query to an SNMP daemon of the network packet router.

6. (previously presented) The method of claim 1, further comprising the steps of:
communicating the current value of the MIB variable to the HTTP-SNMP interface;

3 creating and storing an HTML page that contains the current value of the MIB
4 variable; and
5 sending the HTML page to an HTTP daemon of the network packet router.

1 7. (original) The method of claim 1, further comprising the step of creating and storing
2 an executable software element in association with the Web browser, wherein the
3 executable software element is configured for packaging an SNMP query into the
4 request from the Web browser.

1 8. (original) The method of claim 1, wherein the step of receiving a request from the
2 Web browser to obtain the current value of the MIB variable includes the step of
3 unpackaging an SNMP query that is packaged in the request from the Web browser to
4 identify the MIB variable.

1 9. (previously presented) The method of claim 8, further comprising the step of sending
2 the SNMP query to an SNMP daemon of the network packet router.

1 10. (original) The method of claim 8, wherein the step of returning the current value of
2 the MIB variable to the Web browser includes the step of repackaging the current
3 value of the MIB variable into an HTTP reply message.

1 11. (currently amended) A network device, comprising:
2 a processor;
3 a Management Information Base (MIB) logically accessible by the processor and
4 comprising one or more stored values of MIB variables;
5 a Simple Network Management Protocol (SNMP) daemon executed by the processor;

a Hypertext Transfer Protocol (HTTP) daemon executed by the processor;
stored instructions for obtaining a current value of a Management Information base
(MIB) variable stored in a managed network device network packet router
which, when executed by the processor, cause the processor to carry out the
steps of:
receiving a connection of a Web browser to a the network packet router;
receiving, at an HTTP daemon executed by and hosted within the network
packet router, an HTTP request message from the browser to obtain
the current value of the MIB variable from the network packet router
to which the MIB variable value pertains;
receiving the current value of the MIB variable from the MIB of the network
packet router to which the MIB variable value pertains; and
communicating, using an HTTP reply message from the HTTP daemon and to
the browser, the current value of the MIB variable from the network
packet router to which the MIB variable value pertains ~~to the browser~~
~~using an HTTP reply message.~~

12. (previously presented) The network device of claim 11, wherein the instructions
further cause the processor to carry out the steps of:
creating and storing a MIB object tree in a memory of the network packet router;
creating an electronic document that contains a representation of one or more MIB
variables of the MIB object tree;
communicating the electronic document to the Web browser.

1 13. (previously presented) The network device of claim 11, wherein the step of receiving
2 the current value of the MIB variable from the MIB of the network packet router
3 includes the steps of creating and storing a MIB object tree in a memory of the
4 network packet router ; obtaining the MIB variable from the MIB object tree in the
5 memory of the network packet router .

1 14. (previously presented) The network device of claim 11, wherein the instructions
2 further cause the processor to carry out the steps of:
3 creating and storing a MIB object tree in a memory of the network packet router ;
4 creating an electronic document that contains a representation of one or more MIB
5 variables of the MIB object tree;
6 receiving a user selection of one of the MIB variables based on the electronic
7 document;
8 wherein the step of receiving the current value of the MIB variable from the MIB of
9 the network packet router includes the step of obtaining the MIB variable that
10 is identified in the user selection from the MIB object tree in the memory of
11 the network packet router.

1 15. (previously presented) The network device of claim 11, further comprising an HTTP-
2 SNMP interface which, when executed by the processor, causes the processor to carry
3 out the steps of:
4 receiving the HTTP request message to obtain the current value of the MIB variable
5 at an HTTP-SNMP interface;

creating an SNMP query that requests a current value of the MIB variable based on
the HTTP request message; and
communicating the SNMP query to an SNMP daemon of the network packet router.

16. (previously presented) The network device of claim 11, further comprising the steps
of:

communicating the current value of the MIB variable to the HTTP-SNMP interface;
creating and storing an HTML page that contains the current value of the MIB
variable; and
sending the HTML page to the HTTP daemon.

17. (currently amended) A computer-readable medium carrying one or more sequences of
one or more instructions for obtaining a current value of a Management Information
base (MIB) variable stored in a managed network device in a network packet router,
the one or more sequences of one or more instructions including instructions which,
when executed by one or more processors, cause the one or more processors to
perform the steps of:

receiving a connection of a Web browser to a network packet router;
receiving, at an HTTP daemon executed by and hosted within the network packet
router, an HTTP request message from the browser to obtain the current value
of the MIB variable from the network packet router to which the MIB variable
value pertains;
receiving the current value of the MIB variable from the MIB of the network packet
router to which the MIB variable value pertains; and

14 communicating, using an HTTP reply message from the HTTP daemon and to the
15 browser, the current value of the MIB variable from the network packet router
16 to which the MIB variable value pertains ~~to the browser using an HTTP reply~~
17 ~~message.~~

1 18. (original) The computer-readable medium as recited in claim 17, wherein the
2 instructions further cause the processor to carry out the steps of:
3 creating and storing a MIB object tree;
4 creating an electronic document that contains a representation of one or more MIB
5 variables of the MIB object tree;
6 communicating the electronic document to the Web browser.

1 19. (previously presented) The computer-readable medium as recited in claim 17,
2 wherein receiving the current value of the MIB variable from the MIB of the network
3 packet router includes the steps of creating and storing a MIB object tree in a memory
4 of the network packet router; obtaining the MIB variable from the MIB object tree in
5 the memory of the network packet router.

1 20. (previously presented) The computer-readable medium as recited in claim 17,
2 wherein the instructions further cause the processor to carry out the steps of:
3 creating and storing a MIB object tree in a memory of the network packet router;
4 creating an electronic document that contains a representation of one or more MIB
5 variables of the MIB object tree;

6 receiving a user selection of one of the MIB variables based on the electronic
7 document;
8 wherein receiving the current value of the MIB variable from the MIB of the network
9 packet router includes the step of obtaining the MIB variable that is identified
10 in the user selection from the MIB object tree in the memory of the network
11 packet router.

1 21. (previously presented) The computer-readable medium as recited in claim 17,
2 wherein the instructions further cause the processor to carry out the steps of:
3 receiving the HTTP request message to obtain the current value of the MIB variable
4 at an HTTP-SNMP interface;
5 creating an SNMP query that requests a current value of the MIB variable based on
6 the HTTP request message; and
7 communicating the SNMP query to an SNMP daemon of the network packet router.

1 22. (previously presented) The computer-readable medium as recited in claim 17,
2 wherein the instructions further cause the processor to carry out the steps of:
3 communicating the current value of the MIB variable to the HTTP-SNMP interface;
4 creating and storing an HTML page that contains the current value of the MIB
5 variable; and
6 sending the HTML page to an HTTP daemon of the network packet router.

1 23. (currently amended) An HTTP browser program including a plug-in executable
2 software element configured for obtaining a current value of a Management

3 Information Base (MIB) variable stored in a network packet router and which, when
4 executed by a processor that executes the browser, causes the processor to carry out
5 the steps of:
6 connecting the browser to the network packet router;
7 translating an SNMP query to a HTTP request message;
8 communicating the HTTP request message from the browser to an HTTP daemon
9 executed by and hosted within the network packet router, to obtain the current
10 value of the MIB variable from the network packet router to which the MIB
11 variable value pertains;
12 receiving, in an HTTP reply message from the HTTP daemon, the current value of the
13 MIB variable from the MIB of the network packet router to which the MIB
14 variable value pertains; and
15 displaying the current value of the MIB variable using the browser.

- 1 24. (currently amended) An applet executable in a browser program and configured for
2 obtaining a current value of a Management Information Base (MIB) variable stored in
3 a managed network device packet router in a network and which, when executed by
4 the browser, causes the browser to carry out the steps of:
5 connecting the browser to the network device packet router;
6 translating an SNMP query to a HTTP request message;
7 communicating the HTTP request message from the browser to an HTTP daemon
8 executed by and hosted within the network packet router, to obtain the current

9 value of the MIB variable from the network packet router to which the MIB
10 variable value pertains;
11 receiving, in an HTTP reply message from the HTTP daemon, the current value of the
12 MIB variable from the MIB of the network packet router to which the MIB
13 variable value pertains; and
14 displaying the current value of the MIB variable using the browser.

1 25. (previously presented) The network device of claim 11, wherein the step of receiving
2 a request from the Web browser to obtain the current value of the MIB variable
3 includes the step of unpackaging an SNMP query that is packaged in the request from
4 the Web browser to identify the MIB variable.

1 26. (previously presented) The network device of claim 25, wherein the instructions
2 further cause the processor to carry out the step of sending the SNMP query to an
3 SNMP daemon of the network packet router.

1 27. (previously presented) The network device of claim 25, wherein the step of returning
2 the current value of the MIB variable to the Web browser includes the step of
3 repackaging the current value of the MIB variable into an HTTP reply message.

1 28. (previously presented) The computer-readable medium of claim 17, wherein the step
2 of receiving a request from the Web browser to obtain the current value of the MIB
3 variable includes the step of unpackaging an SNMP query that is packaged in the
4 request from the Web browser to identify the MIB variable.

1 29. (previously presented) The computer-readable medium of claim 28, wherein the
2 instructions further cause the processor to carry out the step of sending the SNMP
3 query to an SNMP daemon of the network packet router.

1 30. (previously presented) The computer-readable medium of claim 28, wherein the step
2 of returning the current value of the MIB variable to the Web browser includes the
3 step of repackaging the current value of the MIB variable into an HTTP reply
4 message.

1 31. (currently amended) A system for obtaining a current value of a Management
2 Information base (MIB) variable stored in a managed network device in a network
3 packet router, the system comprising:
4 means for receiving a connection of a Web browser to a network packet router;
5 means for receiving, at an HTTP daemon executed by and hosted within the network
6 packet router, an HTTP request message from the browser to obtain the
7 current value of the MIB variable from the network packet router to which the
8 MIB variable value pertains;
9 means for receiving the current value of the MIB variable from the MIB of the
10 network packet router to which the MIB variable value pertains; and
11 means for communicating, using an HTTP reply message from the HTTP daemon
12 and to the browser, the current value of the MIB variable from the network
13 packet router to which the MIB variable value pertains ~~to the browser using an~~
14 ~~HTTP reply message.~~

1 32. (previously presented) The system of claim 31, further comprising:
2 means for creating and storing a MIB object tree in a memory of the network packet
3 router;
4 means for creating an electronic document that contains a representation of one or
5 more MIB variables of the MIB object tree;
6 means for communicating the electronic document to the Web browser.

1 33. (previously presented) The system of claim 31, wherein the means for receiving the
2 current value of the MIB variable from the MIB of the network packet router includes
3 means for creating and storing a MIB object tree in a memory of the network packet
4 router;
5 means for obtaining the MIB variable from the MIB object tree in the memory of the
6 network packet router.

1 34. (previously presented) The system of claim 31, further comprising:
2 means for creating and storing a MIB object tree in a memory of the network packet
3 router;
4 means for creating an electronic document that contains a representation of one or
5 more MIB variables of the MIB object tree;
6 means for receiving a user selection of one of the MIB variables based on the
7 electronic document;
8 wherein the means for receiving the current value of the MIB variable from the MIB
9 of the network packet router includes means for obtaining the MIB variable

10 that is identified in the user selection from the MIB object tree in the memory
11 of the network packet router.

1 35. (previously presented) The system of claim 31, further comprising:
2 means for receiving the HTTP request message to obtain the current value of the MIB
3 variable at an HTTP-SNMP interface;
4 means for creating an SNMP query that requests a current value of the MIB variable
5 based on the HTTP request message; and
6 means for communicating the SNMP query to an SNMP daemon of the network
7 packet router.

1 36. (previously presented) The system of claim 31, further comprising:
2 means for communicating the current value of the MIB variable to the HTTP-SNMP
3 interface;
4 means for creating and storing an HTML page that contains the current value of the
5 MIB variable; and
6 means for sending the HTML page to an HTTP daemon of the network packet router.

1 37. (previously presented) The system of claim 31, further comprising:
2 means for creating and storing an executable software element in association with the
3 Web browser, wherein the executable software element is configured for
4 packaging an SNMP query into the request from the Web browser.

1 38. (previously presented) The system of claim 31, wherein the means for receiving a
2 request from the Web browser to obtain the current value of the MIB variable

3 includes means for unpackaging an SNMP query that is packaged in the request from
4 the Web browser to identify the MIB variable.

1 39. (previously presented) The system of claim 38, further comprising means for sending
2 the SNMP query to an SNMP daemon of the network packet router.

1 40. (previously presented) The system of claim 38, wherein the means for returning the
2 current value of the MIB variable to the Web browser includes means for repackaging
3 the current value of the MIB variable into an HTTP reply message.

1 41 (previously presented) The method of Claim 1, wherein the step of receiving a
2 connection comprises receiving a connection to an HTTP daemon in the network
3 packet router, and wherein the step of receiving an HTTP request message comprises
4 receiving an HTTP request message at the HTTP daemon.

1 42 (previously presented) The network device of Claim 11, wherein the instructions
2 cause the processor to carry out the step of receiving a connection by receiving a
3 connection to an HTTP daemon in the network packet router and the step of receiving
4 an HTTP request message by receiving an HTTP request message at the HTTP
5 daemon.

1 43 (previously presented) The computer-readable medium of Claim 17, wherein the
2 instructions cause the one or more processors to perform the step of receiving a
3 connection by receiving a connection to an HTTP daemon in the network packet
4 router and the step of receiving an HTTP request message by receiving an HTTP
5 request message at the HTTP daemon.

1 44 (previously presented) The system of Claim 31, wherein the means for receiving a
2 connection comprises means for receiving a connection to an HTTP daemon in the
3 network packet router, and wherein the means for receiving an HTTP request
4 message comprises means for receiving an HTTP request message at the HTTP
5 daemon.